

In The Claims:

The following is a complete listing of all the pending claims in this application.

Claim 1 (ORIGINAL) A composition of matter that comprises a library of analytes, said analytes being hybridized to an array of nucleic acids, said nucleic acids being fixed or immobilized to a solid support, wherein said analytes comprise an inherent universal detection target (UDT), and a universal detection element (UDE) attached to said UDT wherein said UDE generates a signal indicating the presence or quantity of said analytes, or said attachment of UDE to UDT.

Claim 2 (ORIGINAL) The composition of claim 1, wherein said library of analytes is derived from a biological source selected from the group consisting of organs, tissues and cells.

Claim 3 (ORIGINAL) The composition of claim 1, wherein said analytes are selected from the group consisting of genomic DNA, episomal DNA, unspliced RNA, mRNA, rRNA, snRNA and a combination of any of the foregoing.

Claim 4 (ORIGINAL) The composition of claim 1, wherein said nucleic acid array is selected from the group consisting of DNA, RNA and analogs thereof.

Claim 5 (ORIGINAL) The composition of claim 4, wherein said analogs comprise PNA.

Claim 6 (ORIGINAL) The composition of claims 4 or 5, wherein said nucleic acids or analogs are modified on any one of the sugar, phosphate or base moieties.

Claim 7 (ORIGINAL) The composition of claim 1, wherein said solid support is porous or non-porous.

Claim 8 (ORIGINAL) The composition of claim 7, wherein said porous solid support is selected from the group consisting of polyacrylamide and agarose.

Claim 9 (ORIGINAL) The composition of claim 7, wherein said non-porous solid support comprises glass or plastic.

Claim 10 (ORIGINAL) The composition of claim 1, wherein said solid support is transparent, translucent, opaque or reflective.

Claim 11 (ORIGINAL) The composition of claim 1, wherein said nucleic acids are directly or indirectly fixed or immobilized to said solid support.

Claim 12 (ORIGINAL) The composition of claim 11, wherein said nucleic acids are indirectly fixed or immobilized to said solid support by means of a chemical linker or linkage arm or a linkage arm.

Claim 13 (ORIGINAL) The composition of claim 1, wherein said inherent UDT is selected from the group consisting of 3' polyA segments, 5' caps, secondary structures, consensus sequences and a combination of any of the foregoing.

Claim 14 (ORIGINAL) The composition of claim 13, wherein said consensus sequences is selected from the group consisting of signal sequences for polyA addition, splicing elements, multicopy repeats and a combination of any of the foregoing.

Claim 15 (ORIGINAL) The composition of claim 1, wherein said UDE is selected from the group consisting of nucleic acids, nucleic acid analogs, polypeptides, polysaccharides, synthetic polymers and a combination of any of the foregoing.

Claim 16 (ORIGINAL) The composition of claim 4, wherein said analogs comprise PNA.

Claim 17 (ORIGINAL) The composition of claim 1, wherein said UDE generates a signal directly or indirectly.

Claim 18 (ORIGINAL) The composition of claim 17, wherein said direct signal generation is selected from the group consisting of a fluorescent compound, a phosphorescent compound, a chemiluminescent compound, a chelating compound, an electron dense compound, a magnetic compound, an intercalating compound, an energy transfer compound and a combination of any of the foregoing.

Claim 19 (ORIGINAL) The composition of claim 17, wherein said indirect signal generation is selected from the group consisting of an antibody, an antigen, a hapten, a receptor, a hormone, a ligand, an enzyme and a combination of any of the foregoing.

Claim 20 (ORIGINAL) The composition of claim 19, wherein said enzyme catalyzes a reaction selected from the group consisting of a fluorogenic reaction, a chromogenic reaction and a chemiluminescent reaction.

Claim 21 (ORIGINAL) A composition of matter that comprises a library of analytes, said analytes being hybridized to an array of nucleic acids, said nucleic acids being fixed or immobilized to a solid support, wherein said analytes comprise a non-inherent universal detection target (UDT) and a universal detection element (UDE) hybridized to said UDT, wherein said UDE generates a signal directly or indirectly to detect the presence or quantity of said analytes.

Claim 22 (ORIGINAL) The composition of claim 21, wherein said library of analytes is derived from a biological source selected from the group consisting of organs, tissues and cells.

Claim 23 (ORIGINAL) The composition of claim 21, wherein said analytes are selected from the group consisting of genomic DNA, episomal DNA, unspliced RNA, mRNA, rRNA, snRNA and a combination of any of the foregoing.

Claim 24 (ORIGINAL) The composition of claim 21, wherein said nucleic acid array is selected from the group consisting of DNA, RNA and analogs thereof.

Claim 25 (ORIGINAL) The composition of claim 24, wherein said analogs comprise PNA.

Claim 26 (ORIGINAL) The composition of claims 24 or 25, wherein said nucleic acids or analogs are modified on any one of the sugar, phosphate or base moieties.

Claim 27 (ORIGINAL) The composition of claim 21, wherein said solid support is porous or non-porous.

Claim 28 (ORIGINAL) The composition of claim 27, wherein said porous solid support is selected from the group consisting of polyacrylamide and agarose.

Claim 29 (ORIGINAL) The composition of claim 27, wherein said non-porous solid support comprises glass or plastic.

Claim 30 (ORIGINAL) The composition of claim 21, wherein said solid support is transparent, translucent, opaque or reflective.

Claim 31 (ORIGINAL) The composition of claim 21, wherein said nucleic acids are directly or indirectly fixed or immobilized to said solid support.

Claim 32 (ORIGINAL) The composition of claim 31, wherein said nucleic acids are indirectly fixed or immobilized to said solid support by means of a chemical linker or linkage arm.

Claim 33 (ORIGINAL) The composition of claim 21, wherein said non-inherent universal detection target (UDT) comprises homopolymeric sequences.

Claim 34 (ORIGINAL) The composition of claim of 21, wherein said non-inherent universal detection target (UDT) comprises heteropolymeric sequences.

Claim 35 (ORIGINAL) The composition of claim 21, wherein said UDE is selected from the group consisting of nucleic acids, nucleic acid analogs and modified forms thereof.

Claim 36 (ORIGINAL) The composition of claim 35, wherein said analogs comprise PNA.

Claim 37 (ORIGINAL) The composition of claim 21, wherein said UDE generates a signal directly or indirectly.

Claim 38 (ORIGINAL) The composition of claim 37, wherein said direct signal generation is selected from the group consisting of a fluorescent compound, a phosphorescent compound, a chemiluminescent compound, a chelating compound, an electron dense compound, a magnetic compound, an intercalating compound, an energy transfer compound and a combination of any of the foregoing.

Claim 39 (ORIGINAL) The composition of claim 37, wherein said indirect signal generation is selected from the group consisting of an antibody, an antigen, a hapten, a receptor, a hormone, a ligand, an enzyme and a combination of any of the foregoing.

Claim 40 (ORIGINAL) The composition of claim 39, wherein said enzyme catalyzes a reaction selected from the group consisting of a fluorogenic reaction, a chromogenic reaction and a chemiluminescent reaction.

Claims 41-952 (CANCELED)

* * * * *